

SEQUENCE LISTING

<110> TING, ALICE

<120> GENETICALLY ENCODED FLUORESCENT REPORTERS OF KINASE,
METHYLTRANSFERASE, AND ACETYL-TRANSFERASE ACTIVITIES

<130> M00656.70097.US

<140> NOT YET ASSIGNED

<141> 2003-08-05

<150> US 60/425,578

<151> 2002-11-12

<160> 22

<170> PatentIn version 3.2

<210> 1

<211> 40

<212> PRT

<213> Homo sapiens

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Arg Lys Gln Leu Ala Thr Lys Ala Ala Arg Lys Ser Ala Pro Ala Thr
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Gly Gly Val Lys Lys Pro His Arg
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<211> 30

<212> PRT

<213> Homo sapiens

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<210> 3

<211> 109

<212> PRT

<213> Saccharomyces cerevisiae

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20 25 30

Val Pro Asp Tyr Tyr Asp Phe Ile Lys Glu Pro Met Asp Leu Ser Thr
35 40 45

Met	Glu	Ile	Lys	Leu	Glu	Asn	Lys	Tyr	Gln	Lys	Met	Glu	Asp	Phe	Ile
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Tyr	Asp	Ala	Arg	Leu	Val	Phe	Asn	Asn	Cys	Arg	Met	Tyr	Asn	Gly	Glu
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Asn	Thr	Ser	Tyr	Tyr	Lys	Tyr	Ala	Asn	Arg	Leu	Glu	Lys	Phe	Phe	Asn
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 <212> DNA
 <213> *Saccharomyces cerevisiae*

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gccgacaagc	agaagaacgg	catcaaggcc	cacttcaaga	tccgccacaa	catcgaggac	540
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ccaatggact	tgagcaccat	ggaaataaaa	ttagagagca	acaaatatca	gaagatggaa	900
gacttcatat	atgatgccag	attggtgttt	aacaattgcc	gaatgtacaa	tggcgagaat	960
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<210> 5
<211> 635
<212> PRT
<213> Saccharomyces cerevisiae

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35 40 45
Leu Thr Leu Lys Phe Ile Cys Thr Thr Gly Lys Leu Pro Val Pro Trp
50 55 60
Pro Thr Leu Val Thr Thr Leu Thr Trp Gly Val Gln Cys Phe Ser Arg
65 70 75 80
Tyr Pro Asp His Met Lys Gln His Asp Phe Phe Lys Ser Ala Met Pro
85 90 95
Glu Gly Tyr Val Gln Glu Arg Thr Ile Phe Phe Lys Asp Asp Gly Asn
100 105 110
Tyr Lys Thr Arg Ala Glu Val Lys Phe Glu Gly Asp Thr Leu Val Asn
115 120 125
Arg Ile Glu Leu Lys Gly Ile Asp Phe Lys Glu Asp Gly Asn Ile Leu
130 135 140
Gly His Lys Leu Glu Tyr Asn Tyr Ile Ser His Asn Val Tyr Ile Thr
145 150 155 160
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Asn Ile Glu Asp Gly Ser Val Gln Leu Ala Asp His Tyr Gln Gln Asn
180 185 190

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Thr	Pro	Ile	Gly	Asp	Gly	Pro	Val	Leu	Leu	Pro	Asp	Asn	His	Tyr	Leu
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Met	Val	Leu	Leu	Glu	Phe	Val	Thr	Ala	Ala	Arg	Met	His	Lys	Arg	Gly
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Ala	Ala	Ala	Trp	Pro	Phe	Leu	Gln	Pro	Val	Asn	Lys	Glu	Glu	Val	Pro
			260					265					270		
Asp	Tyr	Tyr	Asp	Phe	Ile	Lys	Glu	Pro	Met	Asp	Leu	Ser	Thr	Met	Glu
		275					280					285			
Ile	Lys	Leu	Glu	Ser	Asn	Lys	Tyr	Gln	Lys	Met	Glu	Asp	Phe	Ile	Tyr
	290					295					300				
Asp	Ala	Arg	Leu	Val	Phe	Asn	Asn	Cys	Arg	Met	Tyr	Asn	Gly	Glu	Asn
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Thr	Ser	Tyr	Tyr	Lys	Tyr	Ala	Asn	Arg	Leu	Glu	Lys	Phe	Phe	Asn	Asn
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			340					345					350		
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			420					425					430		
Asp	Ala	Thr	Tyr	Gly	Lys	Leu	Thr	Leu	Lys	Phe	Ile	Cys	Thr	Thr	Gly
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				485					490					495	
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Glu Asp Gly Asn Ile Leu Gly His Lys Leu Glu Tyr Asn Tyr Asn Ser
530 535 540

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545 550 555 560

Asn Phe Lys Ile Arg His Asn Ile Glu Asp Gly Ser Val Gln Leu Ala
565 570 575

Asp His Tyr Gln Gln Asn Thr Pro Ile Gly Asp Gly Pro Val Leu Leu
580 585 590

Pro Asp Asn His Tyr Leu Ser Tyr Gln Ser Ala Leu Ser Lys Asp Pro
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<210> 7
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<212> PRT
<213> Drosophila melanogaster

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Pro 65	Thr	Leu	Val	Thr	Thr 70	Leu	Thr	Trp	Gly	Val 75	Gln	Cys	Phe	Ser	Arg 80
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Gly 145	His	Lys	Leu	Glu	Tyr 150	Asn	Tyr	Ile	Ser	His 155	Asn	Val	Tyr	Ile	Thr 160
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Arg	Leu	Glu	Lys	Ala	Ile	Asn	Pro	Leu	Leu	Asp	Asp	Asp	Asp	Gln	Val	370	375	380
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Leu	Val	Thr	Thr	Phe	Gly	Tyr	Gly	Leu	Met	Cys	Phe	Ala	Arg	Tyr	Pro	625	630	635
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Tyr	Val	Gln	Glu	Arg	Thr	Ile	Phe	Phe	Lys	Asp	Asp	Gly	Asn	Tyr	Lys	660	665	670
Thr	Arg	Ala	Glu	Val	Lys	Phe	Glu	Gly	Asp	Thr	Leu	Val	Asn	Arg	Ile	675	680	685
Glu	Leu	Lys	Gly	Ile	Asp	Phe	Lys	Glu	Asp	Gly	Asn	Ile	Leu	Gly	His	690	695	700

Lys Leu Glu Tyr Asn Tyr Asn Ser His Asn Val Tyr Ile Met Ala Asp
705 710 715 720

Lys Gln Lys Asn Gly Ile Lys Val Asn Phe Lys Ile Arg His Asn Ile
725 730 735

Glu Asp Gly Ser Val Gln Leu Ala Asp His Tyr Gln Gln Asn Thr Pro
740 745 750

Ile Gly Asp Gly Pro Val Leu Leu Pro Asp Asn His Tyr Leu Ser Tyr
755 760 765

Gln Ser Ala Leu Ser Lys Asp Pro Asn Glu Lys Arg Asp His Met Val
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Leu Tyr Lys

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Lys Gly

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Lys Gly

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<210> 18
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<212> PRT
<213> Homo sapiens

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20 25 30

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Gly Gly Gly Ser
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<210> 21
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